

SECTION 10447 – INTERIOR MODULAR INTERCHANGEABLE SIGNS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Panel signs.
- B. Related Sections include the following:
 - 1. Division 1 Section "Temporary Facilities and Controls" for temporary project identification signs.
 - 2. Division 10 Section "Directories" for building directories.
 - 3. Division 10 Section "Plaques" for building plaques.
 - 4. Division 15 Section "Mechanical Identification" for labels, tags, and nameplates for mechanical equipment.
 - 5. Division 16 Section "Electrical Identification" for labels, tags, and nameplates for electrical equipment.
 - 6. Division 16 Section "Interior Lighting" for illuminated exit signs.

1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of sign.
- B. Shop Drawings: Include plans, elevations, and large-scale sections of typical members and other components. Show layout, profiles, mounting methods, grounds, mounting heights, spacing, reinforcement, accessories, and installation details.
 - 1. Provide message list for each sign, including large-scale details of wording, lettering, artwork, and Braille layout.
- C. Samples for Initial Selection: Submit supplier's color chart for each type of sign material indicated that involves color selection.
- D. Samples for Verification: For each type of sign, include the following Samples to verify color selected:
 - 1. Panel Signs: Full-size Samples of each type of sign required.
 - 2. Approved samples will not be returned for installation into Project.
- E. Qualification Data: For Installer.
- F. Maintenance Data: For signage cleaning and maintenance requirements to include in maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Installer specialized and experienced in work similar to that required for this project shall perform installation.
- B. Source Limitations: Obtain each sign type through one source from a single manufacturer.
- C. Regulatory Requirements: Comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.
 - 1. Interior Code Signage: Provide signage as required by accessibility regulations and requirements of authorities having jurisdiction.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Where dimensions of surfaces on which they are installed determine sizes of signs, verify dimensions by field measurement before fabrication and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS**2.1 MANUFACTURERS**

- A. Where titles below introduce lists, the following requirements apply for product selection:
 - 1. Basis-of-Design Product: The design for each sign is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

2.2 PANEL SIGNS

- A. General: Provide panel signs that comply with requirements indicated for materials, thickness, finish, colors, designs, shapes, sizes, and details of construction.
 - 1. Produce smooth panel sign surfaces constructed to remain flat under installed conditions within tolerance of plus or minus 1/16 inch (1.5 mm) measured diagonally.
- B. Basis-of-Design Product: ASI Sign Systems, I-20 Modulex or a comparable product of the following:
 - 1. APCO Graphics, Inc.
 - 2. Best Manufacturing Co.
- C. Graphic Content and Style: Provide sign copy that complies with requirements indicated for size, style, spacing, content, mounting height and location, material, finishes, and colors of signage.
- D. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with ADA Accessibility Guidelines and ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square cut edges free from burrs and cut marks.
- E. Changeable Message Inserts: Fabricate signs to allow insertion of changeable messages in the form of slide-in inserts.
 - 1. Furnish paper and software for creating text and symbols for IBM compatible computers for Owner production of paper inserts.
 - 2. Furnish paper cut-to-size for changeable message insert.

2.3 SIGNAGE MATERIALS / COMPONENTS

- A. Materials and Components:
 - 1. Fixture Aluminum Panels: Extruded aluminum alloy AA6060, with high temperature cured polyester color coating. Provide one-piece formed aluminum/photopolymer panel for text panels 3-¼ inch (82 mm) height and above.
 - 2. Face Components:
 - a. Text Panels: Aluminum-based photopolymer tactile and Braille characters with high temperature cured polyester coating.
 - b. Graphic Panels: High-strength, cold-rolled, 1/32 inch (0.75 mm) aluminum alloy with high temperature cured polyester coating.
 - c. Flexible Modules: Individual injection molded Noryl letter tiles press fit to cast polycarbonate knob-foil textured base.
 - 3. End Clips:
 - a. Extruded aluminum alloy AA6060 with high temperature cured polyester color coating.
 - 4. Mounting Hardware: Extruded aluminum alloy AA6060 track type rail mounted to wall with manufacturer's recommended mechanical fasteners.
- B. Surface Treatment Finish: Manufacturer's standard two-phase finishing process. Colors as selected from manufacturer's full range.
 - 1. Phase One: Chromatized priming with 2 µm depth chrome layer for optimum surface coat adhesion.
 - 2. Phase Two: Painting process employing two component, water-based, non-toxic, lead-free, zero emissions, high temperature cured polyester coating of 20 to 30 µm depth.

2.4 FABRICATION

- A. General: Comply with requirements indicated for materials, thickness, finishes, colors, designs, shapes, sizes, and details of construction.
- B. Pre-assemble signs in the shop to the greatest extent possible to minimize field assembly. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in a location not exposed to view after final assembly.
- C. Conceal fasteners if possible; otherwise, locate fasteners to appear inconspicuous.
- D. Form panels to required size and shape. Comply with requirements indicated for design, dimensions, finish, color, and details of construction.
- E. Coordinate dimensions and attachment methods to produce message panels with closely fitting joints. Align edges and surfaces with one another in the relationship indicated.

2.5 PANEL SIGN TYPES

- A. Room Signs:
 - 1. Material: Aluminum-based photopolymer.
 - 2. Perimeter: Framed.
 - 3. Copy: Tactile and Braille.
 - 4. Character Style: Helvetica Regular.
 - 5. Text: As indicated in the Sign Schedule.
 - 6. Message: Changeable.
 - 7. Sizes:
 - a. Sign: 6¾ inches (170 mm) high by 11 inches (280 mm) wide.
 - b. Character: Minimum 1-inch- (25-mm-) high characters.

- 8. Colors:
 - a. Character: Bone.
 - b. Background: Slate Blue.
- 9. Schedule: Provide 8 signs- text to be determined

- B. Room Number Signs:
 - 1. Material: Aluminum-based photopolymer.
 - 2. Perimeter: Framed.
 - 3. Copy: Tactile and Braille.
 - 4. Character Style: Helvetica Regular.
 - 5. Text: As indicated in the Sign Schedule.
 - 6. Message: Changeable.
 - 7. Sizes:
 - a. Sign: 4¼ inches (110 mm) high by 11 inches (280 mm) wide.
 - b. Character: Minimum 1-inch- (25-mm-) high characters.
 - 8. Colors:
 - a. Character: White, verify with Owner.
 - b. Background: Cordovan, verify with Owner.
 - 9. Schedule: Provide 8 signs – text to be determined

- C. Symbols of Accessibility: Provide 6-inch- (150-mm-) high symbol fabricated from opaque non-reflective vinyl film, 0.0035-inch (0.089-mm) nominal thickness, with pressure-sensitive adhesive backing suitable for both exterior and interior applications.

2.6 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Verify that items provided under other sections of Work are sized and located to accommodate signs.
- C. Examine supporting members to ensure that surfaces are at elevations indicated or required to comply with authorities having jurisdiction and are free from dirt and other deleterious matter.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Locate signs and accessories where indicated, using mounting methods of types described and in compliance with manufacturer's written instructions.
 - 1. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.
 - 2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches (75 mm) of sign without encountering protruding objects or standing within swing of door.
- B. Wall-Mounted Panel Signs: Install signs in accordance with supplier's written instructions.

3.3 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

END OF SECTION 10447